SMALL BUSINESS ENVIRONMENTAL ASSISTANCE PROGRAM

Serving Small Businesses and the Environment

NEW MEXICO ENVIRONMENT DEPARTMENT

Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

National Emission Standards for Hazardous Air Pollutants (NESHAPs) at Area Sources

40 CFR Part 63 - Subpart BBBBBB (6B)

What are NESHAP Area Sources?

NESHAP regulations were developed to address Hazardous Air Pollutants (HAPs) generated from area sources.

“Area” sources are those sources that emit less than 10 tons per year of one HAP or 25 tons per year of all HAPs combined.

HAP sources may individually, or in the aggregate, present significant risks to public health in urban areas.

Benzene is the HAP of concern for gasoline.

This regulation does not apply to diesel or aviation gas tanks or fueling systems.

Additional Regulations

In addition to Subpart BBBBBB, reference is made to the following:

40 CFR Part 60, Subpart Kb —Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 and

40 CFR Part 63, Subpart WW —National Emission Standards for Storage Vessels (Tanks)—Control Level 2

Regulated Facilities

Storage and distribution facilities that receive gasoline by pipeline, ship, barge, or cargo tank and then load it into cargo tanks for distribution:

- **Bulk Gasoline Plant –** throughput* *less than* 20,000 gallons per day
- **Bulk Gasoline Terminal -** throughput* 20,000 gallons or more per day
- **Pipeline Breakout Station**
- **Pipeline Pumping Station**

***Throughput** is the maximum calculated design throughput for any day; it is not based on average throughput.

Regulated Equipment

- Gasoline storage tanks
- Gasoline loading racks
- Vapor collection-equipped gasoline cargo tanks
- Equipment components in vapor or liquid gasoline service (e.g., valves, pumps, flanges, connectors, vapor collection and processing systems, etc.)

Sources of Emissions

- Tanker Truck unloading into Storage Tanks (usually above ground) - Working loss
- Storage Tanks - Breathing loss
- Loading of gasoline into tank wagons/cargo tanks at a loading rack
- Leaks

Emissions lost are volatile organic compounds (VOCs) and hazardous air pollutants (HAPs)

Gasoline Tank Descriptions

Cargo tank: A delivery tank truck or railcar loading gasoline or which has loaded gasoline on the immediately previous load.

Storage tank: Each tank, vessel, reservoir, or container used for the storage of gasoline.

Surge control tank: Tanks or vessels used only for controlling pressure in a pipeline system during surges or other variations from normal operations.

Vapor collection-equipped cargo tank: A cargo tank outfitted with the equipment necessary to transfer vapors, displaced during the loading of gas into the cargo tank, to a vapor processor system.

Daily throughput: Current day throughput + Total throughput for previous 364 days; then divide that sum by 365.
Details in Table 2 in Subpart 6B

Process Flow of Gasoline Distribution

Pipeline Facilities
- Breakout station
- Pumping station

Bulk Terminal: >20,000 gpd

Cargo Tank Loading Rack

- **Gas stations**
- **Bulk plants**
- **Other**

Cargo Tank

Bulk Plant: ≤20,000 gpd

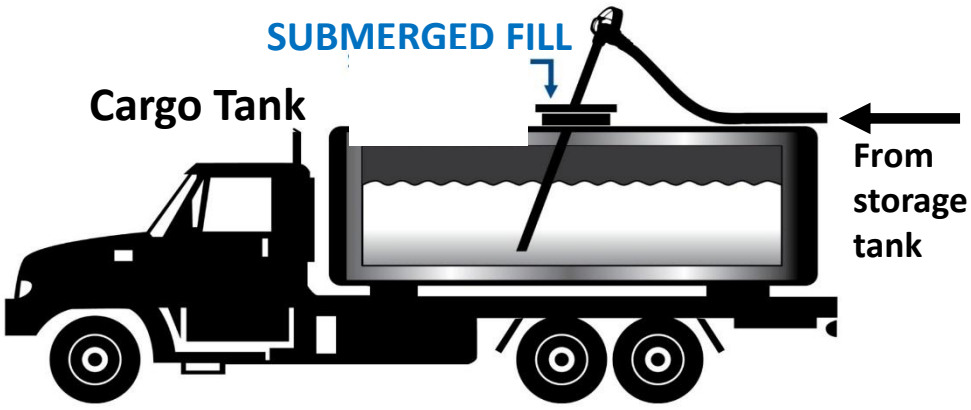
Cargo Tank Loading Rack

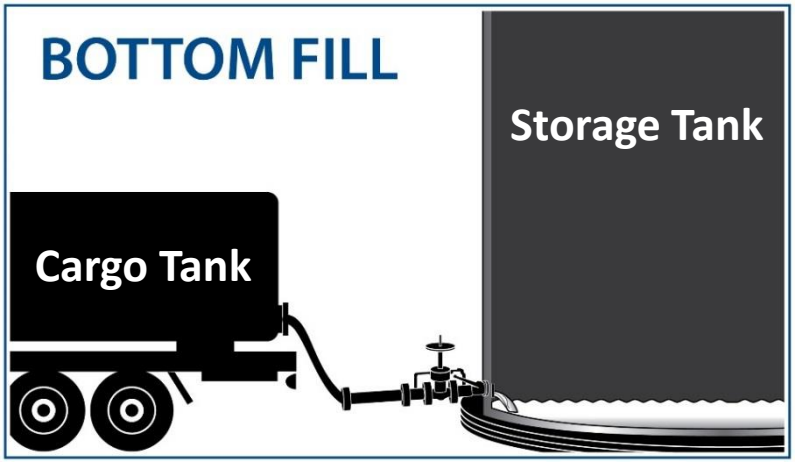
- **Gas stations**

Bulk Plants
Storage Tanks and Cargo Tanks - Requirements

For tanks with a capacity of **250 gallons or more,** use *submerged filling* during loading at the specified distances from the tank bottom:

- ❑ No more than 12-inches for fill pipes installed on or before 11/9/06
- ❑ No more than 6-inches for fill pipes installed after 11/9/06
- ❑ Or, use bottom filling where the liquid level never falls below the pipe discharge and document this practice





Bulk Plants
Storage Tanks and Cargo Tanks - Requirements

For tanks with a capacity of **less than 250 gallons**, do not allow gasoline vapor releases for extended periods of time.

Follow these practices:

- ❑ Minimize spills and clean up them up as quickly as possible
- ❑ When not in use, cover gas containers and tank fill pipes with a seal
- ❑ Minimize gas sent to open waste collection systems

Bulk Terminals and Pipeline Facilities
Storage Tank - Requirements

If tank capacity is **less than 20,000 gallons**, or **less than 40,000 gallons and** with a **throughput of 480 gallons/day or less**:

- ❑ Equip each tank with a fixed roof that is mounted to the tank in a stationary manner and close all openings when not in use

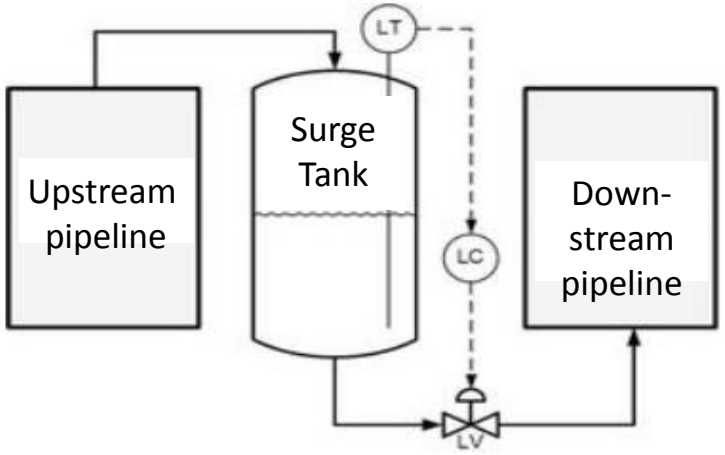
Bulk Terminals and Pipeline Facilities
Storage Tank - Requirements

If tank capacity is **20,000 gallons or more and does not meet the gallons and throughput in previous slide**, implement **one** of following:

- ❑ Use a closed vent system and control device to reduce HAP or Total Organic Carbon (TOC) emissions by 95% according to 2.(a) in Table 1 **or**
- ❑ Equip each internal floating roof tank and secondary seals according to 2.(b) of Table 1 **and**
- ❑ Equip each external floating roof tank according to 2.(c) of Table 1 **or**
- ❑ Equip and operate each internal and external floating roof and secondary seals according to 2. (d) of Table 1.

Bulk Terminals and Pipeline Facilities
Surge Control Tank Requirements

- Equip each tank with a fixed roof that is mounted to the tank in a stationary manner and with a pressure/vacuum vent with a positive cracking pressure of no less than 0.50 inches of water
- Keep all openings in a closed position when not in use



Bulk Terminals
Cargo Tank Loading Racks - Requirements

For tanks with a throughput of **less than 250,000 gallons/day:**

- ❑ Use submerged filling with a fill pipe no more than 6 inches from the tank bottom.
- ❑ If requested, throughput records must be provided within 24 hours

Bulk Terminals
Cargo Tank Loading Racks - Requirements

For tanks with a throughput of **250,000 gallons/day or more:**

- ❑ Equip loading racks with a TOC **vapor collection system** for use during product loading.
- ❑ Reduce TOC emissions to 80 milligrams per liter or less of gasoline loaded.
- ❑ Design and operate the collection system to prevent TOC vapors collected from one rack or lane from passing through another to the atmosphere
- ❑ Use vapor tight cargo tanks. Perform an annual certification test to determine vapor tightness (use EPA Method 27 - Appendix A-8, 40 CFR 60).

Bulk Terminals and Pipeline Breakout Stations Testing and Monitoring Requirements

Inspections

If the gasoline storage tank is equipped with internal or external floating roofs, follow the requirements in 63.11092(e)(1) and (2).

Vapor Control Systems

If the gasoline storage tank is equipped with a closed vent system and control device follow the requirements in 63.11092(e)(3).

Vapor Control Systems
Performance Tests and Monitoring

Bulk Terminals ≥ 250,000 gpd – Cargo Loading Racks

Vapor Processing and Collection Systems:

- Includes carbon adsorption, refrigeration condenser, thermal oxidation, or a demonstrated alternative
- Conduct tests to ensure compliance with emission limits
- Emission limit is the reduction of TOC to ≤ 80 mg/L of gas loaded
- Continuous monitoring systems must be installed along with the control device to ensure compliance
- See 63.11092(a) through (d) for more details

Vapor processors are used to control emissions during cargo tank truck loadings at most bulk terminals.

Equipment Leak Inspections - All Facilities

- Perform monthly inspections of all equipment that transfers gasoline or gasoline vapors
- Sight, sound, and smell methods are acceptable ways to detect leaks for the monthly inspections
- Record the inspections in a log book including detection of a liquid or vapor leak
- Repair leaks as soon as practicable but no later than 5 days after detected
- Final repair or replacement shall be completed within 15-days. If repair not feasible within that time, see 63.11095(b).

Compliance and Notification Deadlines

Compliance Dates

- All facilities must be in compliance.

Initial/Notification of Compliance Status

- Submitted within 60 days after start-up
- The form may be found at: 6B Notification Form

Notification of Performance Test

- Submit notification 60 days prior to conducting the initial test on vapor processing and collection systems.

Recordkeeping

Keep records as specified in 63.11094.

All facilities must have records of equipment leak inspections and each malfunction of operations, controls, or monitoring equipment.

Bulk terminals and pipeline breakout stations with storage tanks must have records of: Inspections, roof seal measurements, and equipment specifications.

Bulk terminals must keep records of: Annual certification tests for cargo tank vapor tightness and continuous monitoring data.

Records must be kept for at least 5-years and be readily available for inspection and review.

Semi Annual Reporting

Bulk terminals and pipeline breakout stations that have control system requirements:

- Verify compliance with specifications for control equipment
- Documentation of vapor tightness tests for cargo tanks
- Report equipment leaks, excess emissions, and malfunction events

Bulk plants, pipeline pumping stations, and all facilities with controls must report excess emissions

All facilities must report malfunctions

A detailed list of information to be included in the report can be found as specified in 63.11095.

For More Information

Visit the EPA webpage at:
http://www.epa.gov/ttn/atw/area/arearules.html

Contact the Small Business Environmental Assistance Program

(505) 222-9500
(Small Business Air Quality staff)

If you need assistance for locations within Bernalillo County, please contact the Air Quality Assistance Program:
(505)768-1972